Application Serial No.: 10/627,143
Applicant(s): Spector et al.

Docket No.: N.C. 84,766

REMARKS

Claims 1-33 remain in this application. Claims 1-26, 28, and 29 have been withdrawn. Claims 27, 30, 31, and 33 have been rejected.

As suggested by the Examiner, Applicants have incorporated the distinguishing limitations into the claims.

Claim rejection under 35 USC 102

The Examiner has rejected claims 27, 30, 31, and 33 under 35 USC 102(e) as being anticipated by Boschetti et al.

The Examiner states that Boschetti discloses a method for assaying analytes with a device comprising a support having a *polysaccharide-based* hydrogel attached to an anchor reagent on a substrate surface.

Boschetti involves the use of a polysaccharide, as noted by the Examiner.

Applicants respectfully submit that the current application involves the use of a regioregular polyacrylate poly(6-acryloyl-beta-O-methyl galactopyranoside). This is separate and distinct from a polysaccharide.

As noted by the Examiner, throughout Boschetti is the use a "non-ionic polysaccharide" base material which serves as a support for proteins, DNA, and cells. This is in contrast to the current application. The current application involves a gel that is *not* composed of polysaccharide, but of the regioregular polyacrylate poly(6-acryloyl-beta-O-methyl galactopyranoside).

Applicants respectfully submit that polysaccharides have a composition and chemical structure that is very different from this polyacrylate. Images attained via light microscopy clearly show that the polyacrylate network has about a 10-micron average pore diameter. Furthermore, the network of the polyacrylate is interpenetrating.

In addition, Applicants have utilized a series of calculations using Fick's diffusion laws and the Navier-Stokes equations that also indicate that the pore sizes are about 10 microns in diameter. Applicants respectfully submit that the large pore sizes and IPN architecture can be advantageous from the standpoint of rapid solute (target) diffusion and gel mechanical integrity. Polysaccharides do not have this architecture.

Applicants respectfully submit that Boschetti does *not* involve a poly(6-acryloyl-beta-O-methyl monosaccharide) structure as a base material, whereas the current application has utilized this structure. Furthermore, applicants respectfully submit that the fact that this material has such large pores and a mechanically strong IPN structure would *not* have been obvious to one skilled in the art.

As suggested by the Examiner, Applicants have incorporated the distinguishing limitations into the claims.

Applicants respectfully request reconsideration.

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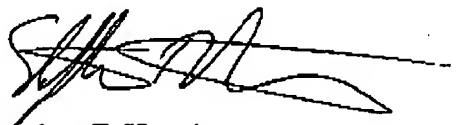
Conclusion

In conclusion, Applicants respectfully submit that the Examiner's Office Action has been fully responded to and that the claims are in condition for allowance. In the furtherance of compact prosecution, if a personal or telephone interview would help expedite matters, the Examiner is requested to contact Steve Hunnius at 202-404-1554.

Kindly charge any additional fees due, or credit overpayment of fees, to Deposit Account No. 50-0281.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,



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